

Abstract of the Disclosure

An umbilical cable for delivering electrical signals between an aircraft and a smart weapon carried by the aircraft. The umbilical cable includes cabling comprising a plurality of conductive wires, a first connector provided on one end of the cabling and configured to connect to the aircraft, and a second connector provided on the other end of the cabling and configured to connect to the smart weapon. The umbilical cable further includes an interface circuit electrically coupled between the first connector and the second connector via the plurality of conductive wires. The interface circuit is configured to receive via the first connector a non-standard combination of signals comprising at least one of data signals, control signals and power signals not receivable directly by the smart weapon to carry out operations. Moreover, the interface circuit is configured to convert the non-standard combination of signals to a set of signals receivable by the smart weapon to carry out operations, and to provide the set of receivable signals to the smart weapon via the second connector.